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This is the final submitted version of the published article;

Cowan, P. (2015) "The Democracy of Colour", *Journal of Media Practice* 16:2. J. McDougall and Neal White (eds.), pp. 139-154. Oxon: Routledge, ISSN: 1468-2753, DOI: 10.1080/14682753.2015.1041806

The Democracy of Colour

Abstract

The evolution of the technical reproduction of colour in film has been categorised and studied in great detail. The aesthetic use of expressive colour has not had as much attention historical. Vacche's and Price's *Color: The Film Reader* seemed to spark a critical interest in this area. In this article, writing as a practising cinematographer, I outline a brief history of the discussions of the use of colour in film, examine two significant attempts to define a colour theory for film, Kalmus, and Storaro, and then discusses in detail my own practice in this area. The article concentrates on *The Sleeping-Mat Ballad*, a project commissioned by the Welsh National Opera (WNO) and The Space, and the short animation film *The Separation*. In both these films I explores the expressive use of colour, as a function of the cinematographer.

Keywords

Film, Colour, Cinematography, Authorship

Introduction

It has only been relatively recently that the use of colour in the creation of

meaning has begun to generate some critical interest. Vacche's and Price's (2006) *Color: The Film Reader*, which focused on collecting and reprinting historical writings on the subject, seemed to kick start a fresh inquiry into this area over the last decade.

The evolution of the technical reproduction of colour in film has been categorised and studied in great detail. The aesthetic use of expressive colour has not had as much attention. It is my intention to outline a brief history of the discussions of the use of colour in film, and then detail my own practice in this area. I will concentrate on *The Sleeping-Mat Ballad* (Constantas 2014), a project commissioned by the Welsh National Opera (WNO) and The Space, and the short animation film *The Separation* (Morgan 2003). With both these films I, as the cinematographer, explore the expressive use of colour.

A context for this specific discussion of a cinematographer's contribution to the use of colour, is provided by Russell (1981), who is one of very few critics to study the particular contribution of the cinematographer, in contrast to the prevailing assumption of most film criticism which credits the director with any authorial responsibility (Polan, 2001). Russell does discount the cinematographers' ability to control colour; however I will examine the particular reasons she gives for this assertion (1981: 47).

I will briefly examine critical attitudes to colour, and present two significant attempts of defining a colour theory for film, Kalmus ([1935] 2006), and Storaro (1998, 2002), before detailing my own experimentation in this area.

Contexts of colour

The evolution of the technical reproduction of colour in film has been categorised and studied in great detail (Salt 2009; Higgins 2007). The aesthetic use of expressive colour has only recently begun to get attention (Vacche and Price 2006; Coates 2010; Peacock 2010; Brown, Street and Watkins 2012).

The reasons for this historical neglect are typified by Russell in her study of cinematography (1981). She makes a conscious decision not to include colour as an attribute of light, outlining three specific reasons for doing so. Its diverse cultural connotations, its lack of existence in the first fifty years or so of film

production and her belief that colour is not controlled by the cinematographer (Russell 1981: 47). All these objections can quite easily be overcome if, first, the context of culture is considered. Second, it is acknowledged that colour has been a fundamental component in film production for more than the last fifty years. And finally, if the notion of collaborative film making is accepted. Cinematographers can control colour, especially that of the light, but also in terms of art direction, and set design. In my own two examples, *The Sleeping-Mat Ballad*, and *The Separation* I had significant control over the colour, not just the colour of the light, but the colour of the sets and their decor.

In his introduction to *Color: The Film Reader* (2006), Price makes the observation that colour has been a relatively ignored area of study, "unlike the major areas of investigation within film studies-genre, *auteurism*, national cinema-to name a few, color remains an area of inquiry significantly less well heeled" (1). He fully endorses Branigan's observation made in 1976 that, "'criticism of film to the present day has largely proceeded as if all films were made in black and white' (Branigan 1976: 20). Surprisingly, the situation has changed very little in the past thirty years" (1). Russell's argument is partly that colour is subject to cultural connotations, and that uses of colour are "subjective impressions" not appropriate for "objective methods of examination" (1981: 47). Price contrasts this conclusion with the careful consideration that the filmmaker makes with their choice of colour, underlining the significance of colour as a creative element.

> The neglect of color in film studies is a curious one. Color is not simply a choice a filmmaker makes at the level of film stock; rather, having selected color (as most filmmakers today are so inclined) color becomes a constructive element of mise-en-scene, one that works alongside of lighting, sound, performance, camera movement, framing, and editing. Color is thus no incidental characteristic of film stock; it is an element, carefully considered by set designers, cinematographers, and directors, all of whom must remain sensitive to the way in which color can create meaning, mood, sensation, or perceptual cues. (Price 2006: 2)

Price indicates the importance of colour in communicating meaning to an audience. Early commentators on colour did recognise this as a potential use of colour. Mitry states in 1963, "Until now, color has been used merely to achieve greater realism... Even so, it is possible even nowadays to use color for *dramatic* purposes" ([1963] 1998: 226).

> The harmony or disharmony of colored sensations is an element of expression capable of complementing or contradicting the meaning of the film signification. The danger is in using color to compose a "good-looking" image, to make "pretty pictures," to signify through harmonies *within the shot*, tacking a color symbolism onto the formal symbolism... Instead of creating "inherently" harmonious compositions, the filmmaker must create structures in tune with the psychological meaning of the drama. (Mitry [1963] 1998: 226-227)

Mitry calls for a use of colour that echoes, or underlines, the "psychological meaning of the drama". It is this use of colour that I have endeavoured to utilise in the two films in this study. The question that arises out of Mitry's demand is how can we define the psychological meaning of certain colours? Steve Neale, in the essay *Technicolor*, taken from his book *Cinema and Technology: Sound, Image, Colour* ([1985] 2006), outlines the early development of the uses and associations of colour. Early uses of colour were initially novel, and limited to expensive features, so colour was associated with spectacle:

> As colour began to be used on television for news and current affairs programmes, the overwhelming association of colour with fantasy and spectacle began to be weakened: colour acquired instead the value of realism. (Neale [1985] 2006: 22)

This early association of colour with realism is connected to the introduction of certain technology into different contexts, rather than any psychological function. In the same way handheld camerawork was initially extensively used in documentary and news gathering, so its subsequent appropriation by fictional filmmaking, notably *Saving Private Ryan* (Spielberg 1998) was drawing primarily on this contextual association. Colour like every other consideration of *mise-en-scene* can be exploited for different stylistic intentions, ranging from realism to representation, a method of expressionistic meaning. A particular effect may be employed to create a sense of realism, and in this instance colour can be subject to simple issues of reproduction. The simple aim here is to re-produce the colours seen on the set or location as accurately as possible in the filmic image. As with the film image, or recording format, it is easy to get obsessive about the purely technical aspects of the subject, which Price outlines (2006: 11). Russell also makes the point, in her study of lighting, that the study of light due to its physical properties, "often remove it from the world of the critic to that of the physicist" (1981: 13). The same could be said of colour. She also notes, that "problems of lighting are left... to the historians who chronicle the changing

relationship between advances in technology and their general acceptance in the classical cinema of Hollywood" (13). Again this observation could generally be applied to the use of colour in film. Often critics or academics will concentrate on the technical evolution of the use of colour, rather than any aesthetic discussion. Price makes a similar observation:

> The bulk of the research that has been done on color in film thus far has centered on the development of color film technology and the ways in which emergent color processes affected film style. (2006: 11)

This emphasis is not always mirrored in critics' discussion of other aspects of *mise-en-scene*, for example, discussions of film noir lighting are almost never proceeded by outlines of lighting technology, optics and exposures. Why should an aesthetic discussion on colour have to be framed around "... precepts about vision and the ontological status of color" (Vacche and Price 2006: 11)? This argument has parallels with the usual bias of any discussion of the cinematographers' role and function, which itself is often burdened with a technical/technology emphasis. I have discussed this issue in depth in my article *Underexposed: The neglected art of the cinematographer* (Cowan 2012). Looking at colour as a function of the cinematographers' creative contribution to a film allows us to narrow down this broad, and predominantly scientific direction of study. I would put the mechanical processes involved to one side, and deal with colour in terms of its use and meaning within the projected image. My intention is to separate out the technical evolution, and look more closely at the semiotic use of colour, to consider specific uses of colour by particular directors of photography, in this case, Vittorio Storaro, and in my own work.

Price includes in his *Film Reader* a presentation by Natalie M. Kalmus, who was Head of Technicolor's Color Advisory Service, and makes the point that, in film-making practice, colour has been considered in terms of its aesthetic and expressionistic qualities from its introduction.

> 'Color Consciousness' is an elaboration of Kalmus's aesthetic and is nothing less than a blueprint for understanding color patterns and associations intended in Technicolor films. One could say without risk of overstatement that Kalmus was a genuine auteur, a figure whose signature is as evident, if not more so, as the more celebrated directors with whom she worked. Moreover, Kalmus occupied a unique position as someone who developed a coherent style in consultation with the scientists who developed the system itself.

(Vacche and Price 2006: 11-12)

Price's evocation of the *auteur* theory opens up debates about authorship, and particularly co-authorship in film, which relates in part to the argument that I am putting forward for the cinematographer's contribution to this field. Kalmus served as the Technicolor advisor on the majority of films using Technicolor equipment from the 1930s to 1950s. She responded to the shift towards realism in her 1935 lecture *Colour Consciousness*, presented to the technicians' branch of the Academy of Motion Picture Arts and Sciences (Higgins 2007: 41).

> This enhanced realism enables us to portray life and nature as it really is, and in this respect we have made definite strides forward. A motion picture, however, will be merely an accurate record of certain events unless we guide this realism into the realms of art. (Kalmus [1935] 2006: 24)

Kalmus is making the argument to treat colour in a more expressionistic, representational way, suggesting that its exploitation by the film-maker is dependent on their understanding of colour psychology. To an extent Kalmus' desire to see colour used in an artistic way anticipates Mitry's ([1963] 1998). Kalmus makes the point that a film attempts to "control the thoughts and emotions" of its audience. She states that, "The psychology of color is all-important in this respect" (26).

Kalmus is convinced that colour can be used selectively to represent dramatic moods, and manipulate the emotions of the audience. She goes on to define broad categories within an overall colour palette.

> The usual reaction of a color upon a normal person has been definitely determined. Colors fall into two general groups. The first group is the 'warm', and the second the 'cool' colors. Red, orange, and yellow are called the warm or advancing colors. They call forth sensations of excitement, activity, and heat. In contrast, green, blue, and violet are the cool or retiring colors. They suggest rest, ease, coolness. Grouping colors in another manner we found that colors mixed with white indicate youth, gaiety, informality. Colors mixed with gray suggest subtlety, refinement, charm. When mixed with black, colors show strength, seriousness, dignity, but sometimes represent the baser emotions of life. Kalmus [1935] 2006: 26)

There is a prescriptive nature to Kalmus's meanings created by mixing colours

with white, gray or black. However her initial categorisation mirrors the physical high energy of the shorter wavelength colours, the so-called ‘warm’ colours, and the longer wavelength of the ‘cooler’ colours. This is mirrored by Storaro’s own interpretation of colours. Kalmus goes on to give specific meaning to single colours.

> For example, red recalls to mind a feeling of danger, a warning. It also suggests blood, life, and love. It is materialistic, stimulating. It suffuses the face of anger, it led the Roman soldiers into battle. Different shades of red can suggest various phases of life, such as love, happiness, physical strength, wine, passion, power, excitement, anger, turmoil, tragedy, cruelty, revenge, war, sin, and shame. (Kalmus [1935] 2006: 26)

The interpretations Kalmus attributes to the colour red vary considerable. She includes wine, which is just red in colour. Some of her associations seem to be intellectual definitions, that is red may be used as symbol for danger, or as a signifier for blood. However, which shade is equivalent to love, which to war? How are these contrasting interpretations controlled? Kalmus goes on to define meanings for a range of colours (Kalmus [1935] 2006: 26-27). Again Kalmus presents associations that have different methodologies. Associations that are literal, for example nature is green. Interpretations that are motivated by cultural associations, for example gold as riches, green as jealously, true blue, purple as royalty, which originates in the use of expensive pigments in Byzantine portraiture.

There is a need to clearly separate the different methodologies of meaning, and types of association, that Kalmus employs. In order to address this problem I would propose that a starting point would be to suggest that colour has three functions within the projected image: realism, psychological, cultural.

Colour is predominantly used to increase the realism of a filmic image, as suggested by Neale (2006: 22). There was a distinct shift from the superficiality of colour when it was first introduced and its almost complete acceptance as a fundamental aspect of a filmic image. Writing in 1963, Mitry makes the observation that “Until now, color has been used merely to achieve greater realism.” (Mitry [1963] 1998: 226). The majority of films today tend to treat colour in a naturalistic, or realistic, way. Creating a naturalistic, or realistic, image does not mean using only available or ‘natural’ light. Often a naturalistic look needs to be artificially created.

Colour certainly has a psychological effect, and to an extent this is the most difficult to quantify, without further in-depth research. It requires an understanding of various colour theories, but unlike cultural meanings of colour, I would suggest that the psychological effect of colour is more universally consistent. It is perhaps signified by an emotional resonance within the viewer.

Cultural use of colour is dependant on an intellectual, symbolic use, which can vary in different parts of world. This is a separate way to use and interpret colours, which relies on pre-described meanings being attached to a colour. The context of those meanings is within the wider cultural and intellectual domain of each region. A simple example is that black is used for mourning in Western cultures, while white serves the same connotative function in Asian cultures. Mitry attacks the intellectually symbolic use of colour in favour of the more distinct psychological use.

> The psychological significance of color depends on relative harmonies and not on the qualitities of the colors themselves. Making red stand for anger, blue for tenderness, and yellow for treachery is to create an elementary if not infantile form of symbolism. In the same way that musical sounds have no meaning except relative to each other, so the relationships of various tones with a predominating tone and the resulting harmonies direct the mind toward a predetermined meaning. Since this is imposed by the dramatic situation, there can be only one harmony, one resonance, especially since, for the most part, colored sensations tend to conform with the associations given them; their symbolism is subordinate. (Mitry [1963] 1998: 227)

Mitry confines the meaning of colours to their contextual use. Creating meaning with both the psychological and cultural use of colour can also be affected by its contextual use within the text, i.e. the film. Kracauer supports this point, contrasting cultural connotations of colour with their contextual use in *Alexander Nevsky* (Eisenstein, 1938). He points out the obvious use of white hoods for the Teutonic Knights, “white usually suggestive of innocence here is made to signify scheming ruthlessness” (Kracauer 1960: 68).

Mitry and Kracauer both imply a balance needs to be maintained between the psychological or cultural response to a colour, and its contextual use. Vittorio Storaro is a cinematographer who exploits colour in this way. Born in 1940, Storaro developed an early interest in cinema, as his father worked as a film

projectionist. During his time shooting over 50 films, in 40 years, Storaro has developed a particular approach to the use of colour. His most significant collaboration has been with Bernardo Bertolucci, with whom he has made eight films; *The Spider's Stratagem* (1969), *The Conformist* (1970), *Last Tango in Paris* (1972), *1900* (1975), *La Luna* (1979), *The Last Emperor* (1987), *The Sheltering Sky* (1990), *Little Buddha* (1994). He has also written extensively about his philosophical approach to his work, particularly in his three volume work called, *Writing with Light, 1. The Light* (2001), *2. Colours* (2002), *3. The Elements* (2003). As one of the most respected Directors of Photography in the world, he has been at the forefront of gaining co-authorship status for cinematographers, both legally and artistically. Over his career he has developed a philosophy of colour, which he has experimented with, and explored throughout most of his films:

> I am trying to describe the story of the film through the light. I try to have a parallel story to the actual story so that through light and color you can feel and understand, consciously and unconsciously, much more clearly what the story is about. (Schaefer and Salvato 1984: 220-221)

This approach he calls a "literature of light" (Schaefer and Salvato 1984: 232). *The Last Emperor* is a key example of how Storaro considers colour in terms of narrative. He created a very specific colour structure to the film, which reflected the main character's development throughout the narrative.

> In this way, the photographic structure which seemed perfect for writing the story of *The Last Emperor* with light extended itself before my eyes: a figurative composition that, initiating his journey out of darkness, from the murky tonalities of the unconscious, would lead through the colored rips of his memories, in a parallel reliving of *feelings, emotions, and colors* toward the illumination of a new life. (Storaro 1998: 60)

Storaro's interpretation of colours has certain parallels with Kalmus'. Storaro defines orange as a "symbol of growth" (1998: 60), Kalmus calls it "bright and enlivening; it suggests energy, action" ([1935] 2006: 26). There are, of course, varying definitions, blue to Storaro represents freedom (61), for Kalmus it is suggestive of truth (27). However Storaro's definition in this case are prompted by their contextual use in the film *The Last Emperor*. Blue is first introduced in the film when Pu Yi, the Emperor, first realises that he is in fact a prisoner in the Forbidden City. Storaro deliberately associates green with knowledge,

and rebirth, as it is first introduced when the Emperor's English Tutor arrives at the Forbidden City (61). Kalmus' interpretation of green is a fairly broad one, it "recalls the garb of Nature... freshness, growth, vigor" (27).

Storaro is fairly unique amongst cinematographers, as he has written extensively about the philosophy of his work. His ideas about colours developed from film to film, sometimes based on the context of the individual narrative, and sometimes on as his own overall philosophy of colours. Storaro is a key example of how colour can be used in a more representational way, especially when it is linked to a specific contextual use. His work also demonstrates why colour should be included in any analytical framework of cinematography, and not just regarded as a result of a photographic process or reproductive accuracy.

The Sleeping-Mat Ballad* and *The Separation

In November 2014 the Welsh National Opera (WNO) announced a co-commission with The Space, an online gallery and commissioner. The theme of the commission, entitled *Occupation - Five songs that shock the world*, was public protest. Five composers were asked to respond to contemporary acts of protest happening around the world. Each composer was given a two-week window to chose a theme, and compose the song. The intention was that a video to accompany each song would be produced, with the support of Ffilm Cymru (formerly known as the Film Agency for Wales), whose remit includes the economic, educational and cultural development of the film sector in Wales.

Judith Weir, Master of the Queen's Music, one of the chosen composers, was inspired by the street protests happening at the time in Hong Kong. The pro-democracy protests began in September 2014, following China's Standing Committee of National People's Congress (NPCSC) decision to only allow officially sanctioned candidates to stand in the city's leadership election in 2017.

The protest, which led to a prolonged occupation of Hong Kong's financial and political hub developed into a commune-style gathering, and was dubbed 'Occupy Central', and 'The Umbrella Revolution'. Thousands of post-it notes were used to display messages of support, and explanations of the protestors' demands. These covered walls near the Hong Kong government headquarters.

Yellow became a representative colour of the protest, with yellow ribbons being tied around barriers and fences. Umbrellas also became a symbol of the protest with a large proportion of the protestors using them to shield themselves from the sun, the rain, and police tear gas. Many of the umbrellas were coloured yellow. Judith Weir outlined her own motivation for selecting this particular topic.

> Reading about the remaining camps, I was touched by the idealism of the student protesters, and the frail beauty of their living spaces. For instance, we read that some of them had woven mats to sleep on – and that's where our Occupation song begins… (http://www.occupation.org.uk/songs/judith-weir)

Margaret Constantas was commissioned to direct the video for Song 2, *The Sleeping-Mat Ballad*. Having worked with Margaret on a number of projects, including the BAFTA award winning *The Confectioner* (1997), *Brenin* (2004), and more recently *Branches: The Nature of Performance* (2014), I was happy to collaborate on the project as cinematographer.

Our initial conversations involved the visual narrative of the images, which Margaret was keen not to simply illustrate the libretto, but to add another layer of meaning to the project. It was our intention to highlight the character of the protestor, and, to an extent, follow her journey through the protest to date (at the time of making the video the protests were still ongoing). As I write, the Hong Kong police are clearing the protest camps (December, 2014).

Initially inspired by the clear use of symbolic colour to represent the protest, it became my intention to expand on this, and utilise a strong sense of representational colour throughout the film.

The starting point was, of course, the yellow mat. Yellow in our scheme was to represent hope. It is the symbol of the protest. It appears not only in the mat, but within the sea of post-it notes that offer support for the protest (Figure 1). I choose to have a continuous yellow backlight on our single character, to accent her position as part of the protest. The colour has this association immediately with the protest, due to its use in the *mise-en-scene*, as Mitry would agree (Mitry 1963: 227). Kalmus described yellow embodying wisdom, reward, and other positive elements in its lighter tone. This would also be appropriate for its use in The Sleeping-Mat Ballad. Storaro uses yellow to represent conscience, as in self-awareness, which does chime with its use here.

Figure 1: The Yellow Mat. © WNO/The Space/Fflim Cymru 2014.

Figure 2: Red floods in. © WNO/The Space/Fflim Cymru 2014.

Figure 3: Blue restored. © WNO/The Space/Fflim Cymru 2014.

It seemed fairly obvious to use red as both an intellectual symbol for the Chinese government, and as a straight-forward symbol of fear and danger, in which we risk the accusation of “infantile... symbolism” from Mitry ([1963] 1963: 227). The red begins to appear in the background, over-taking the more tranquil blue (Figure 2). The red is dominant as the wind, which also represents opposition to the protest, begins to sweep away the post-it notes, along with our character’s own thoughts and declarations, represented by the yellow tissue paper. Storaro associates red with birth (2002), which would seem contradictory to its use in *The Sleeping Mat Ballad*.

The blue background acts as both a representation of an external scene, and a symbol of calm and freedom. Kalmus suggests blue denotes truth, calm and hope ([1935] 2006: 27), which would certainly apply in this instance. Storaro’s association of freedom with blue in *The Last Emperor* would parallel its use here (1998: 61), however, Storaro makes a later, more generally association of blue with intelligence, in his book *Writing with Light Vol. 2: The Colors* (2002). Blue is restored to the background in the final scene of *The Sleeping Mat Ballad*, in order to convey the permanence of the idea of freedom (Figure 3).

Figure 4: *The Separation*, birth in white. © S4C/Sgrîn/WAC 2003.

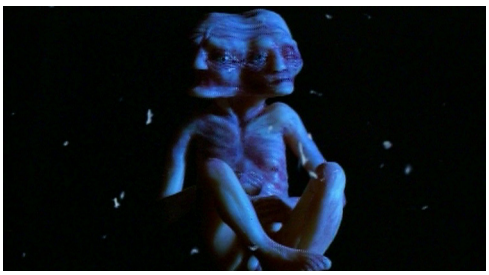

Figure 5: Death in black. © S4C/ Sgrîn/WAC 2003.

There have been a couple of projects in the past in which I have attempted to work to a coherent colour structure. *The Separation* (Morgan, 2003) is one I consider to be more accomplished.

The Separation is an animated, stop-motion film that tells the story of conjoined twins, Dave and Muster, who are separated in their infancy and harbour a desire to be rejoined. The film has won 12 'Best Film' awards at various film festivals around the world, including my second collaborative BAFTA Cymru win for 'Best Short Film' in 2004. Robert Morgan wrote the dark, but moving script, and his anthropomorphic animation of the characters elicits a compelling sympathy.

For *The Separation*, I used a very steady progression through all the colours of the spectrum, in much the same way as Storaro introduces colours and associates them with specific thematic ideas in *The Last Emperor*, each colour having a particularly symbolic and emotional quality. The film is book-ended by white and black, which overall, represent the journey from birth to death, white representing birth (Figure 4) and black representing death (Figure 5). The first image is of the baby twins floating around in an abstract white environment, pre-birth. It could be argued that is certainly a cultural use of colour, particularly a Western one. John Gage, in his book, *Colour and Meaning* (1999), observes that the artist Kandinsky draws the same associations with these colours, although for the time he states that, "... his [Kandinsky's] characterization of black and white as 'death' and 'birth' are both unusual" (243). Storaro makes a seemingly contradictory analyse of white.

> It is the color associated with Equilibrium, in the sense of balanced feelings, emotions and colors; with Maturity achieved at the end of life's long journey. More than any other color, it represents the Joining

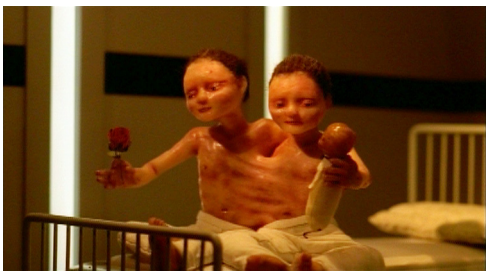

Figure 6: Warm togetherness.
© S4C/Sgrîn/WAC 2003.

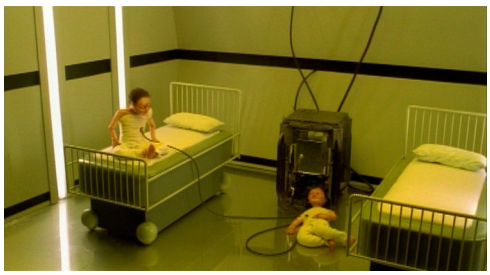

Figure 7: Separation in yellow.
© S4C/Sgrîn/WAC 2003.

and Union of everything that was once separated. (Storaro 2002: 124)

However his definition does refer to balance and union, which represents the state of the twins at the beginning of their lives, rather than the end. Storaro's assumption is that with maturity comes balance, but *The Separation* represents time's arrow travelling from order to chaos, which is a more scientific approach, rather than a spiritual one.

The life of the characters begins in orange. This is a very warm, comforting colour. It represents the ideal time for them, which is when they are physically joined together (Figure 6). There are no immediate contradictions with either Kalmus or Storaro with this context. When the twins are separated, yellow is introduced (Figure 7). This is a much harsher colour. It's very focused and it is used to represent the characters' self-awareness, and their realisation of where they are and who they are. It is used as a self-conscious colour, much in the same way as Storaro uses it in *The Last Emperor*. Here it represents the fact that the twins are now separated, and have become aware of themselves and their environment. Gage refers to the intellectual valve of yellow (1999: 242). We also see much more of their environment at this stage of the film. The first sequence is lit with a very soft, low-key lighting; the focus of attention is clearly the twins. When the doctors approach the light level increases, and the shot widens, so that their environment becomes more apparent, reflecting the twins growing awareness of themselves and their circumstances.

Red is a deeply passionate colour, positive or negative, anger or love, and this represents the one twin, Muster, and his desire to be somehow rejoined with his brother (Figure 8). This colour is introduced when the brothers are older. In this case it could be described as a warning of danger, as it is this passion, which will ultimately lead to tragedy. However, at this stage of the film it is clearly associated

Figure 8: Red reflects desire. © S4C/Sgrîn/WAC 2003.

Figure 9: Safe in green. © S4C/ Sgrîn/WAC 2003.

with Muster's desire to be rejoined to his brother. This could be seen as a positive or a negative at this point of the narrative.

At this stage of the film we are also in semi-light, semi-shadow, which symbolises the halfway point of their lives, and represents the balance they have struck between being together and being apart. Their workshop environment is green. For me this symbolises the safeness and neutrality of the space (Figure 9). Storaro's association of green with knowledge would not seem to apply (2002). However if we refer to Gage's study of the meaning of various colours we find a sympathetic analysis of red and green, which can be applied to *The Separation*.

> Mondrian's characterization of red and green as respectively external and internal might simply refer to their role in the modeling of flesh, but the context suggests that they were far more than this... In Besant and Leadbeater's *Thought-Forms* (1901) red, Mondrian's female, material colour is characteristic of pride, avarice, anger and sensuality, and green, his male, spiritual value, of sympathy and adaptability. (Gage 1999: 260)

The pride and sensuality of red fits well with Muster's physical desire to be rejoined with his brother, which can also be seen as an external state. The spiritual valve of green, its sympathy and adaptability corresponds with the fact that the twins have settled into a life together within the same space, the workshop. Kalmus associates dark green with passivity and tranquility ([1935] 2006: 27), which are appropriate to the Twins' workshop environment.

Creating a rich colour palette can depend on the lighting, but it is also crucial in terms of the art direction. The red in the bedroom, and the dominant green in the workshop (Figures 8 and 9), are achieved almost exclusively by the set design. Flooding the workshop with green light would give an uncomfortable light on the

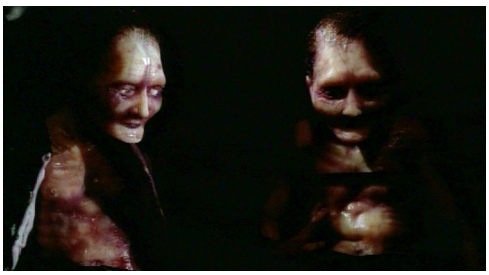

Figure 10: The darkest moment. © S4C/Sgrîn/WAC 2003.

Figure 11: Blue begins to overtake. © S4C/Sgrîn/WAC 2003.

Figure 12: Final deep blue. © S4C/Sgrîn/WAC 2003.

faces of the characters. So the cinematographer works very closely with the set designer, costume designers, and art directors to achieve the overall visual style. Production designer, Stéphane Collonge worked on *The Separation*, creating some stunning sets.

As the twins agree on the idea of being rejoined the film becomes much darker. Very low-key images are used in the scene when they make the decision to be rejoined (Figure 10). Dave's self-harm is highlighted here as well. I wanted to reduce the film to very dark images at this point to reflect the 'darker' desires of the characters and their emotional low-points. By this stage we have gone from the overall soft light in the hospital at the start, to high contrast light at the film's darkest moment.

The final scenes are working their way to the final colour, blue. This is achieved solely through the lighting; there is nothing blue on the set. I have attempted to justify, or motivate the blue light, by the fact it might be dawn. Muster gets out of bed, and as he dresses Dave by the window, the blue light gets stronger (Figure 11). When we reach the hospital the image is almost entirely blue (Figure 12). Blue is a very distant colour, and soft, almost out of focus. It is dark, and subdued. No passion, no life. This is a colour at rest, and the characters are returning to where they were separated to do just that, rest, and die:

> Blue embodies the approach of night and symbolizes the dormancy that descends on nature as winter draws nigh. In the Ages of Man, it corresponds to a withdrawal from public life, the calming of the senses, and fading passion" (Storaro 2002: 94)

Storaro evokes similar emotions in the value of blue, which correspond to the twins reaching entering the last stage of their life. Kalmus suggests that blue has associations with truth, calm and serenity ([1935] 2006: 27), which again is sympathetic in its use in these final scenes. In terms of using such a dominant colour in the final sequence, I felt it was important that there is the reference to white light in the hospital. I specifically designed the strip lights in the wall so that there would be a reference to white in the frame, so that the eyes of the viewer can't settle on the blue. Without the reference to white, I felt that the audience would grow immune to the use of blue in the scene, their eyes may 'adjust', and after a short time would not see it anymore.

What I intended with *The Separation* is to represent the journey of the characters by the progression of the light and colours. Being a small-scale animation film, completely shot in a studio, I was able to have complete control over the lighting and explore this idea of the visual style having its own narrative, but one that reflected and supported the characters' journey, very effectively.

Conclusion

In constructing my own representational colour structures for *The Sleeping Mat Ballad*, and *The Separation*, I found many parallels in my contextual use of colours and the colour schemes defined by both Kalmus and Storaro, particularly the use of orange, yellow and blue. Kalmus seemed to have the most appropriate associations, including aspects of red, and the use of dark green, whereas Storaro has more contradictory definitions, specifically with white and red.

Within my proposed separation of the use of colour into three functions, realism, psychological or cultural it could be argued that the comparisons between Klamus', Stoarao's and my own colour schemas are more sympathetic when considered within a psychological framework. Differences are much more evident in any cultural or intellectual use of colour, Storaro's red as birth, green for knowledge or white as balance. My own use of Red to represent the Chinese

authority is an intellectual use of the colour, which relies on its contextual use in the film. These contextually associations run the risk of becoming an "infantile form of symbolism" according to Mitry ([1963] 1998: 227), unless that "symbolism is subordinate" to the contrasting or harmonious juxtaposition of other colours in the imagery. The red in *The Sleeping Mat Ballad* seeps in from the edges of the frame and over-powers the calmer, softer tones of the blue and yellow, its presence dominates the following sequence, clashing quite vibrantly with the yellow that represents the protest. This juxtaposition of colours has its own visual resonance beyond the crude symbolism, so I would hope that Mitry would forgive me.

There is a thin line between the use of colour in a psychological way and a cultural way. The former I would categorise as having a more emotional, intuitive response within an audience, and the latter an intellectual one. This mix is evident in *The Sleeping-Mat Ballad* with the use of red and yellow. *The Separation* not only contains cultural uses of colour, notably red for passion, but also has psychological uses of colour, green for the safe environment of the workshop, the warm orange at the start, and the self-conscious yellow.

With these examples of my own work, and that of Storaro's, I have challenged Russell's argument that colour is not controlled by the cinematographer (1981: 47). The case studies that I have discussed clearly shows the significant contribution a cinematographer can make to the creation of meaning in the filmic image, and consequently go some way to further a co-author claim for directors of photography in the wider attribution of authorship debate.

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